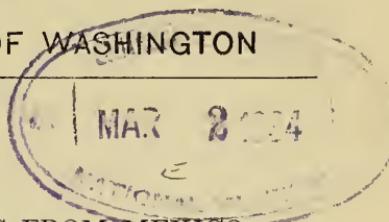


October 26, 1933

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



MAR 2 1934

NEW SPECIES OF SKINKS FROM MEXICO.

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Among the collections of the United States National Museum are two small skinks of the genus *Eumeces* which appear to be unnamed. Due to the courtesy of Dr. Leonhard Stejneger and Miss Doris Cochran, both of the Museum, I have been given the privilege of describing these interesting novelties.

Both forms are from the western part of Mexico; one, *Eumeces parvulus*, from Nayarit and Sinaloa; the other, *Eumeces parvauriculatus*, from Sonora. This territory is much less known than the plateau region, and it is highly probable that other interesting species await discovery in this part of Mexico.

Eumeces parvulus, sp. nov.

Type.—Catalogue No. 56903, United States National Museum. Collected, Tepic, Nayarit, Mexico, April 10, 1910.

Diagnosis.—A small species, having a dorsolateral line beginning on rostral, passing back on side of head, and neck, and disappearing about the middle of the back; a lateral light line from rostral to ear, following the lower edge of labials; no median light line or bifurcating lines on head; four supraoculars; no postnasal; one postmental; parietals enclose interparietal; frontonasal touches frontal; a relatively very large primary temporal, larger than lower secondary temporal, and in contact with it. Twenty-four scale rows about the middle of the body; postgenial large, bordered on inner edge by a scale wider than long.

Description of type.—Part of rostral appearing on anterior tip of snout small, separated from frontonasal by the paired supranasals; frontonasal broader than long, angular anteriorly, rounded posteriorly, forming a considerable suture with the frontal, and in contact laterally with the anterior loreal; frontal more than a third longer than its distance from tip of snout, truncate anteriorly, rounded behind, constricted at a point about one-third the distance from the posterior edge, broadly in contact with the three anterior supraoculars; frontoparietals distinctly rectangular, making a median suture less than one-third of their length; interparietal rather

small, broadly enclosed by the parietals; first pair of nuchals very large, nearly twice the depth of the second pair; nasal small, distinctly divided; first loreal distinctly higher, but narrower than the second, in contact with first and second labials; two presuboculars; six superciliaries, the first nearly twice the area of second; four supraoculars, the third the widest; first touching the prefrontal; three postsuboculars; the single primary temporal almost as large as the upper secondary temporal, and much the same shape; the lower secondary temporal somewhat fan-shaped, smaller than the primary temporal. Seven upper labials, four preceding the subocular, the first higher than the three following and equally as high as subocular; the seventh upper labial largest, followed by a pair of postlabial scales

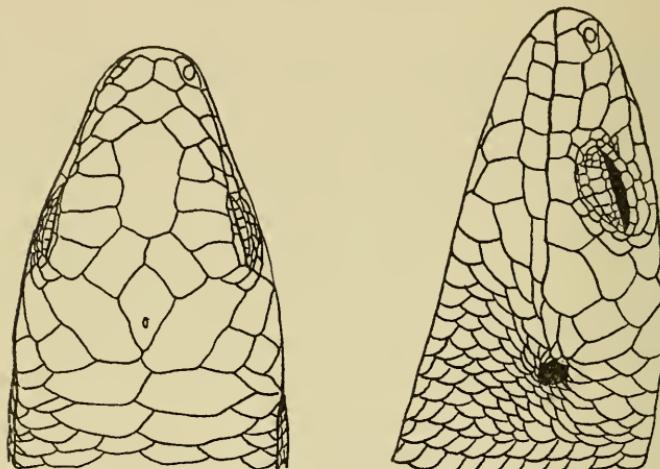


FIG. 1.—*Eumeces parvulus*, sp. nov. U. S. N. M. No. 56903. Type. Head, dorsal and lateral views. Actual head length, 9 mm.

of which the lower is narrow, longer than the upper; these are separated from the ear lobules by two or three very small scales; seventh labial largest, not in contact with the upper secondary temporal and separated from ear by a distance less than its length; six lower labials; mental large, forming a longer labial border than rostral; a postmental, and three pairs of chin-shields, the latter followed by an elongate postgenial scale which is bordered on anterior inner edge by a scale much broader than long; diameter of eye about equal to distance from nostril, but distinctly shorter than distance to ear; the median palpebral scales in direct contact with the superciliaries; lower eyelid with a series of four enlarged opaque or semi-transparent scales, separated from the subocular by two or three scale rows, the lowest largest; ear moderate, surrounded by about 14 to 15 scales; the line separating the post-auricular series from the lateral nuchal series vertical and separated from ear by five scale rows; scale rows around neck behind ear, 27; about constricted part of neck, 24; about body in axillary region, 31; about middle of body, 24; the intercalated axillary series are all

dropped at a distance from axilla a little greater than length of the foreleg. The scales on back are rather small, rounded behind, the median rows not larger than other dorsals, but dorsals are all larger than laterals or ventrals; limbs short but rather stout; palm bearing a few enlarged rounded scales, not distinctive, with several smaller granules; foot without enlarged scales save about heel; the lamella formula of forefoot, 4 : 6 : 9 : 10 : 5; hind foot, 3 : 7 : 9 : 13 : 5. The two median preanal scales somewhat enlarged; three small lateral preanal scales on each side, the outer of which overlap the inner; subcaudal scales slightly wider than adjoining scales; 63 scales in row from parietals to above anus.

Color.—(In alcohol.) Above brownish olive; dorsolateral light line beginning on snout, passes back along head and follows first the third, then fourth scale rows; it disappears about middle of body; the dorsal ground color is eight rows wide on middle of body; a brown lateral stripe from the rostral passes back along the side of head and body where it shows dimly, covering two scale rows; a lateral line begins on the rostral but terminates at the ear after passing along the lower edges of the labials; chin and lower labials cream; the remainder of the lower surfaces grayish; preanals and the under side of limbs lighter; the grayish color of belly borders the brown lateral stripe.

Measurements of the type and paratypes of Eumeces parvulus, sp. nov.

	U. S. N. M.	U. S. N. M.	U. S. N. M.
Number	56903	51395	47667
Snout to vent.....	51	37	28.5
Snout to foreleg.....	14	13	9
Snout to ear.....	8.3	8	6.3
Snout to eye.....	3.2	3	2.2
Head, greatest width.....	7	5	4.5
Head length.....	9	6	6
Greatest body width.....	9	7	4.6
Axilla to groin.....	32	20	15
Postanal tail width.....	5	3.6	2.7
Foreleg.....	9	8	6.3
Hindleg.....	14	12	8
Longest toe.....	6	3.6	2.2

(Tail either broken or incomplete in all specimens. No. 51395 measures 50 mm. with the latter part missing, but regeneration begun.)

Variation.—Two additional specimens, No. 51395 U. S. N. M. from Miniman, Nayarit, Mexico (Coll. J. C. Thompson) and a second, No. 47667 U. S. N. M. collected at Plumosas, Sinaloa (Coll. Nelson and Goldman) are at hand for comparison.

The first of the two shows the following variations in sculation: 62 instead of 63 scales from head to above vent; about 15 scales about ear; there are 14 instead of 13 lamellæ under longest toe; the adpressed limbs are very narrowly separated when adpressed while in the larger specimen they are

separated by 8 millimeters. The color of this form is darker, appearing brownish above with the dorsolateral lines cream and well differentiated to about midway on body. The lateral stripe is difficult to differentiate from body color; chin and throat cream color; the color of the abdomen appears somewhat in darker and lighter lines, a character also visible but dim in the type; under side of tail lighter than abdomen, the median part with a lighter streak; regenerated tip on tail, cream.

No. 47667 U. S. N. M. from Plumosas, Sinaloa, Mexico, shows a number of abnormal peculiarities. The frontonasal and prefrontals are fused into a single scale and this separated from the frontal by a partly obliterated suture; the posterior constriction of the frontal is very slight; the enclosed interparietal is as broad as long; the primary temporal is as large as upper secondary but both are slenderer in type; the head appears to be proportionally wider; there appears to be only 22 scale rows (the specimen has been injured, and it is difficult to make an accurate count at middle of body); other scales and markings are similar, generally, to type, the line behind ear being wholly absent; the color above is grayish brown, the lateral brown line very distinct.

If the character of the fused frontonasal and prefrontals were not abnormal, it would be necessary to recognize this as a distinct species. However, I strongly suspect it is abnormal and for the time being it will be placed under this species. Similar anomalies have been observed in specimens of several other species.

Remarks.—The relationship of the species is not clear, and appears to show more characters in common with the newly described form, *Eumeces parviauriculatus*, as I have suggested under that species; and possibly also to a newly described form, *Eumeces ochoterenae* Taylor, from the high mountains of Guerrero, Mexico.

Eumeces parviauriculatus, sp. nov.

Type.—Catalog, No. 47536 United States National Museum. Collected near Alamos, Sonora, Mexico, Jan. 5, 1899, by E. A. Goldman. Field No. 1134. Male, apparently young adult.

Diagnosis.—A small slender species, with a distinct dorsolateral line beginning on rostral, and continuing posteriorly on sides, losing itself on the back; a lateral line begins on rostral and continues across labials and ear to forearm where it is lost; one postmental; no postnasal; parietals not enclosing interparietal; four supraoculars, three touching frontal; seventh labial largest of series but relatively small, scarcely larger than sixth, and separated from the extremely small auricular opening by a distance greater than its length; primary temporal large in contact with the very large lower secondary; postlabial scales overlap edge of auricular opening; 20 scale rows around body; subcaudals somewhat enlarged; two nuchals; small tubercular scales behind and above the insertion of forearm.

Description of type.—The part of the rostral appearing above, very small; separated from the frontonasal by the pair of supranasals which form a median suture; frontonasal much broader than long, pointed anteriorly,

rounded posteriorly, touching anterior loreal; prefrontals small, widely separated, their sutures with frontal equal to that with the frontonasal; also forming sutures with two loreals, the first superciliary and first supraocular; frontal broad and elongate, much longer than its distance to the end of the snout, and distinctly constricted at a point about one-third the distance from the posterior end; frontoparietals very much larger, at least double the size of the prefrontals, and form a moderately long median suture; interparietal wide and short, not enclosed by the parietals; a pair of well developed nuchals followed by a second pair (scales broken on left side); nasal small, the nostril directed strongly forward and downwards; two loreals, the anterior very high, touching first and second labials; second loreal somewhat rectangular, touching the second and third labials; four supraoculars, the anterior nearly triangular, forming a small suture with prefrontal, the third widest forming an angular wedge between the frontal and frontoparietal (on right side due to an injury apparently, the

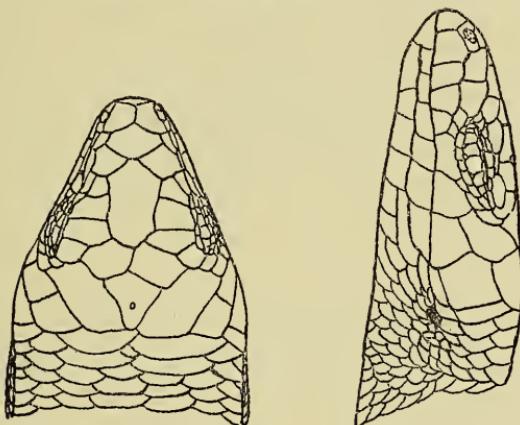


FIG. 2.—*Eumeces parviauriculatus*, sp. nov. U. S. N. M. No. 47536. Type Head, dorsal and lateral views. Actual head length, 7 mm.

two first supraoculars are partly fused and these with the first superciliary); five superciliaries, the first not greatly larger than the second; two presuboculars, three postsuboculars; primary temporal large (larger on left side than right side), larger than seventh labial, broadly in contact with the lower secondary temporal; the upper secondary temporal largest, smaller on left than right side; the lower secondary nearly square, forming an elongate suture below with a very narrow elongate postlabial; second postlabial separates the two scales from the auricular opening and overlaps its edges; the tertiary temporal small, separated from auricular opening by a scale; seven labials, last largest, but not greatly larger than sixth; the subocular very low, distinctly lower than first labial; the first much higher than three succeeding; six lower labials; postmental large, single; three pairs of chinshields, the first pair broadly in contact, second separated by a single scale; last pair followed by an elongate postgenial bordered

internally by an enlarged scale much wider than long; the larger scales in front of and above auricular opening, overhang it; no lobules can be observed; about ten scales about border of ear; eye small, as long as or slightly longer than its distance from nostril much less than its distance from ear; the line dividing the postauricular scale series from the lateral nuchal series curves strongly forward; the scales of the median row following nuchals much widened; on body the median rows of scales are somewhat wider than adjoining series, the posterior edges not strongly curved, practically parallel with their anterior edge. Scale rows behind ear, 25; on constricted portion of neck, 23; behind arm, 26; around middle, 20; about base of tail, 15; there are 63 scales in a row from parietal to above anus; the scales on sides and abdomen are smaller than the median dorsals; the extra axillary rows are dropped at a point less than once and half length of forearm from axilla; behind arm and continuing above arm to point of anterior insertion are several rows of small granular flattened, non-imbricating scales; a median pair of preanal scales, much enlarged, and two lateral scales on each side, the outer of which overlap the inner; a lateral postanal scale elongate but not otherwise differentiated; subcaudal scales widened, at least two to two and one-half times as wide as deep, more than a half wider than adjoining scale rows; limbs slender, delicate, very widely separated when adpressed; a few rounded enlarged tubercles on palm separated by the series at base of digits by several small granular tubercles; a few enlarged granules on sole near enlarged scutes bordering heel, others on sole small; the lamella formula for hand is: 3 : 7 : 7 : 8 : 5; for the foot, 4 : 7 : 10 : 11 : 7.

Color.—(In alcohol. Probably much discolored.) Above dark slaty brown, the scales appearing darker on their sutures, forming indistinct dotted darker lines; a distinct light colored dorsolateral line from rostral back along sides on the third scale row, which is lost on the posterior part of back; a lateral line beginning on labials continues back, involving ear, to forearm; chin, lower labials, and breast, cream; belly dark. A darker lateral band, which passes from the side of head, through eyes, and along the side, is difficult to distinguish laterally, but is continued on tail; the scales show large central brown areas with lighter edges.

Measurements of the type of Eumeces parviauriculatus, sp. nov.

Snout to vent.....	47
Snout to foreleg.....	14
Snout to ear.....	7.9
Snout to eye.....	3
Head width, greatest.....	6
Head length from nuchals.....	7
Greatest body width.....	6
Axilla to groin.....	28
Postanal tail width.....	4.3
Foreleg.....	7.3
Hindleg.....	10.6
Longest toe.....	4

Remarks.—Only a single specimen, the type, has been examined. The type is in poor condition; many of the scales have slipped, and the abdomen is somewhat softened. The viscera have been removed. The tail is present, but is broken into two pieces; the tip is regenerated; the fore feet have been dried. Despite this, none of the essential characters are obscured.

The relationship of the form is not clear. It is probably a degenerate form and may be distantly related to *Eumeces parvulus* described in this paper. It differs in having a smaller ear opening overlapped by the scales on its anterior border; the character of the temporals and the character of the scales at the insertion of arm and the unenclosed parietal; the character of the frontal and the relationships with the supraoculars; the wide separation of the seventh labial from the ear and the different shape, relative size and character of the scales surrounding the body.

It is probably totally unrelated to the recently described *Eumeces dicei* Ruthven and Gaige. This form, judging by the character of the temporals, belongs to another section of the genus.

The known *Eumeces* fauna of Sonora is indeed meager, this being the only specimen I am aware of, certainly from this large state. *Eumeces callicephalus* Bocourt and *Eumeces humilis* Boulenger and some form *Eumeces brevirostris* Günther may be expected to occur. Its relationship appears to be with none of these forms.

